

The listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

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10. (Amended) A semiconductor device comprising:  
a silicon substrate forming one of a collector and an emitter, the substrate being of a first conductivity type;  
a layer of SiGe of a second conductivity type covering at least a portion of the silicon substrate; [and,]  
a first layer of polysilicon of the second conductivity type at least substantially supported by and covering a substantial portion of the SiGe layer with the exception of a window region, the layer of SiGe having its surface unaffected by a process of etching within the window region, the first layer of polysilicon forming a [SiGe] base terminal of the transistor; and,  
a second layer of polysilicon of the first conductivity type covering and contacting the unetched SiGe [base] layer of the transistor, said layer of polysilicon forming the other of the collector and the emitter.
11. (Amended) A semiconductor device as defined in claim 10 wherein the silicon substrate comprises [is] n-type material and forms the collector.
12. (Amended) A semiconductor device as defined in claim 11 wherein the layer of SiGe [is] comprises p-type material, and wherein the second layer of polysilicon [is] comprises n-type material and forms the emitter.
13. (Amended) A semiconductor device comprising:  
a silicon layer of a first conductivity type;  
a layer of SiGe of a second conductivity type covering at least a region of the silicon layer; and,

a first layer of polysilicon of the second conductivity type at least substantially supported by and covering a substantial portion of the SiGe layer with the exception of a small window; and,

a second layer of [poly]silicon of the first conductivity type covering the window region and contacting the SiGe layer within this small window, where the SiGe layer within the window region has a surface unaffected by a process of etching.

14. (Original) A semiconductor device as defined in claim 13, wherein the silicon layer serves as a substrate and is substantially thicker than the layer of SiGe.

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cont'd. 15. (Original) A semiconductor device as defined in claim 13 wherein the SiGe layer has a substantially uniform thickness.

16. (Amended) A semiconductor device as defined in claim 13 wherein the thickness of the SiGe layer covered by the second layer of [poly]silicon is of a substantially a same thickness and impurity concentration as the remaining portion of the layer of SiGe covering at least a region of the silicon layer.

B7 22. (Original) A semiconductor device according to claim 10, comprising an insulating layer between the two layers of polysilicon.

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D3 23. (Original) A semiconductor device according to claim 22, wherein the insulating layer is formed by reacting the first layer of polysilicon with a substance to form an insulating cover thereon.

24. (Original) A semiconductor device according to claim 22, wherein the insulating layer is formed by depositing an insulating material thereon.

25. (Original) A semiconductor device as defined in claim 10, wherein the SiGe layer has a substantially uniform thickness.

26. (Original) A semiconductor device as defined in claim 10, wherein the thickness of the SiGe layer covered by the second layer of polysilicon is of a substantially a same thickness and impurity concentration as the remaining portion of the layer of SiGe covering at least a region of the silicon layer.

27. (Original) A semiconductor device according to claim 13, comprising an insulating layer between the two layers of polysilicon

28. (Original) A semiconductor device according to claim 27, wherein the insulating layer is formed by reacting the first layer of polysilicon with a substance to form an insulating cover thereon.

29. (Original) A semiconductor device according to claim 27, wherein the insulating layer is formed by depositing an insulating material thereon.

30. (Amended) A semiconductor device [as defined in claim 10,] comprising:  
a silicon substrate forming one of a collector and an emitter, the substrate being of a first conductivity type;  
a layer of SiGe of a second conductivity type covering at least a portion of the silicon substrate;  
a first layer of polysilicon of the second conductivity type at least substantially supported by and covering a substantial portion of the SiGe layer with the exception of a window region, the layer of SiGe having its surface unaffected by a process of etching within the window region, the first layer of polysilicon forming a [SiGe] base terminal of the transistor; and,  
a second layer of polysilicon of the first conductivity type covering and contacting the unetched SiGe [base] layer of the transistor, said layer of polysilicon forming the other of the collector and the emitter,

wherein the SiGe layer has a controllable thickness profile in a direction transverse the layers within the semiconductor substrate within predetermined limits, the controllable thickness profile for providing substantially reproducible results for the thickness of the SiGe layer.

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cont'd. 31. (Original) A semiconductor device as defined in claim 30, wherein the controllable thickness profile provides substantially reproducible electrical characteristics of the SiGe layer.

32. (Original) A semiconductor device as defined in claim 31, wherein the controllable thickness profile of the SiGe layer is other than a uniformly thick layer.

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